

is white haired and medial area which is black haired. Marginal hairs of meso-scutum black, mixed with silvery white. Supra-alar and post-alar tufts white. Pleura black, with black and grey hairs on post-mesopleural prominence; silvery white post-mesopleural and squamal tufts.

Legs. Black with yellow tarsi.

Wings. Orange anteriorly, more greyish yellow posteriorly, with a narrow blackish zone along posterior border. Membrane with two large dark brown patches; the first occupies the entire radial field from the apex of R_1 to a point slightly distal to the bifurcation of R_{4+5} ; the second extends along R_{4+5} to its bifurcation with R_3 , and widens posteriorly to include the discal cell and m-cu cross-vein.

Abdomen. Shining black dorsally and ventrally, with a pair of indefinite paler areas and zones of white hairs on the first visible tergite; tergal hairs black, white laterally, except towards the apices, where they are more or less replaced by black.

Length. 11.5 - 11.9 mm.

FEMALE. Unknown.

P. tigris is a very distinct species which can be confused only with *fulvus*, from which it is distinguished by the orange antennae and darker wings.

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Reference

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RECENT SPECIMENS OF *VESPULA* (*PARAVESPULA*) *GERMANICA* (FABRICIUS) (HYMENOPTERA: VESPIDAE) TAKEN IN SYDNEY

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Edwards (1976) has discussed the world distribution pattern of the German Wasp [as *Paravespula germanica* (Fab.)]. Originally of Holarctic distribution it is now known also from New Zealand (Thomson, 1922; Thomas, 1960), Tasmania (Anonymous, 1962) and Western Australia (Anonymous, 1977).

The only published record of the species in New South Wales appears to be that of Chadwick and Nikitin (1969) who list one specimen (a queen, now in the collection of the Biological and Chemical Research Institute, Rydalmere)

intercepted by quarantine authorities in Sydney on sawn *Pinus radiata* timber from New Zealand on 1.xi.1954. The same collection contains a second queen, similarly intercepted, taken in tamarillos (tree tomatoes) from New Zealand on 24.vii.1968.

On 10.vi.1975 Dr D. K. McAlpine found a dead worker specimen outside the Australian Museum and on 19.ii.1977 Mrs A. S. Smithers took a living worker specimen from a window in the Sydney suburb of Turramurra (both specimens in the Australian Museum). The origin of these specimens is, of course, not known but it may be significant in the case of the Turramurra specimen that visitors from New Zealand had been guests in the house during the previous week.

Queens of the species are easily and often transported by man and this has been suggested as the most important means of spread in New Zealand (Thomas, *loc. cit.*); this is probably due to the queens' habit of hibernating during winter. On the other hand, some colonies are known to be active through winter in some of the frost free areas of New Zealand. At present it is not known whether the species is established in the Sydney area; nests have not been found.

A related species, *V. vulgaris* (L.) is known to be well established in Melbourne and as the two species are not easy to distinguish in the field without close examination it is possible that *V. germanica* could become established there without being noticed.

It is hoped that this note will encourage observers to keep a watch for these conspicuously marked black and yellow wasps. The authors will be pleased to receive specimens suspected of being *Vespula* spp. for identification.

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